

Translation

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference T 45172WO/NZ/hs	FOR FURTHER ACTION	See Form PCT/IPEA/416
International application No. PCT/DE2004/001554	International filing date (<i>day/month/year</i>) 16.07.2004	Priority date (<i>day/month/year</i>) 21.07.2003
International Patent Classification (IPC) or national classification and IPC B41M3/14, B41M1/36, B42D15/00		
Applicant LEONHARD KURZ GMBH & CO. KG		

<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>5</u> sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> (sent to the applicant and to the International Bureau) a total of _____ sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>																									
<p>4. This report contains indications relating to the following items:</p> <table><tr><td><input checked="" type="checkbox"/></td><td>Box No. I</td><td>Basis of the report</td></tr><tr><td><input type="checkbox"/></td><td>Box No. II</td><td>Priority</td></tr><tr><td><input type="checkbox"/></td><td>Box No. III</td><td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td></tr><tr><td><input type="checkbox"/></td><td>Box No. IV</td><td>Lack of unity of invention</td></tr><tr><td><input checked="" type="checkbox"/></td><td>Box No. V</td><td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td></tr><tr><td><input type="checkbox"/></td><td>Box No. VI</td><td>Certain documents cited</td></tr><tr><td><input type="checkbox"/></td><td>Box No. VII</td><td>Certain defects in the international application</td></tr><tr><td><input type="checkbox"/></td><td>Box No. VIII</td><td>Certain observations on the international application</td></tr></table>		<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input type="checkbox"/>	Box No. II	Priority	<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI	Certain documents cited	<input type="checkbox"/>	Box No. VII	Certain defects in the international application	<input type="checkbox"/>	Box No. VIII	Certain observations on the international application
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Date of submission of the demand	Date of completion of this report																								
Name and mailing address of the IPEA/EP	Authorized officer																								
Facsimile No.	Telephone No.																								

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

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Box No. I

Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language _____, which is the language of a translation furnished for the purposes of:
- ☐ international search (Rule 12.3 and 23.1(b))
- ☐ publication of the international application (Rule 12.4)
- ☐ international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
- ☐ the international application as originally filed/furnished
- ☒ the description:
- pages 1-23 _____ as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☒ the claims:
- nos. 1-24 _____ as originally filed/furnished
- nos.* _____ as amended (together with any statement) under Article 19
- nos.* _____ received by this Authority on _____
- nos.* _____ received by this Authority on _____
- ☒ the drawings:
- sheets 1/9-9/9 _____ as originally filed/furnished
- sheets* _____ received by this Authority on _____
- sheets* _____ received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages _____
- ☐ the claims, nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages _____
- ☐ the claims, nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	<u>1-24</u>	YES
	Claims		NO
Inventive step (IS)	Claims	<u>1-24</u>	YES
	Claims		NO
Industrial applicability (IA)	Claims	<u>1-24</u>	YES
	Claims		NO

2. Citations and explanations (Rule 70.7)

- 1 This report makes reference to the following documents:

D1: US 4 715 623 A (CANTOR JOSHUA C ET AL)
29 December 1987 (1987-12-29)

D2: "DUDEN; Das große Wörterbuch der deutschen Sprache in sechs Bänden", Volume 4, page 1783; 1977 reprint

Document D2 was not listed in the international search report. A copy of the document is attached.

- 2 Document D1 is considered the prior art closest to the subject matter of claim 1 and discloses [see figures 15 and 16; column 5, line 32 to column 6, line 4] a method in which a printing substance (32) is applied using a printing method to form a pattern on a substrate (20) and in which, before the printing substance (32) is applied, a surface structure (27) comprising a number of grooves is replicated in the surface of the substrate (20), from which the subject matter of independent

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claim 1 differs in that the surface structure is microscopic and in that the fine structuring of the surface pattern is determined by the locally applied quantity of the printing substance and the local relief parameters of the microscopic surface structure. The subject matter of claim 1 thus meets the requirements of PCT Article 33(2).

The present invention can therefore be considered to address the problem of being able to produce a surface pattern with a high resolution. The solution to this problem as proposed in claim 1 of the present application meets the requirements of PCT Article 33(3) for the following reasons: the solution is not disclosed by any of the documents cited in the international search report and is also not suggested by a combination thereof.

- 3 Document D1 is also considered the prior art closest to the subject matter of claim 17 and discloses [see the passages cited above] a multilayer element (20) that comprises a substrate layer and a patterned layer arranged on the substrate layer, the patterned layer consisting of a printing substance (32) that is applied using a printing method to form a pattern on the substrate layer, a surface structure (27) comprising a number of grooves being replicated in the surface of the substrate layer, said surface structure being visible to the naked eye, from which the subject matter of independent claim 17 differs in that the surface structure is microscopic, that is

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can be recognised only with the aid of a microscope. The subject matter of claim 17 thus meets the requirements of PCT Article 33(2).

The present invention can therefore be considered to address the problem of achieving fine structuring of the surface pattern and a higher resolution. The solution to this problem as proposed in claim 17 of the present application meets the requirements of PCT Article 33(3) for the following reasons: the solution is not disclosed by any of the documents cited in the international search report and is also not suggested by a combination thereof.

- 4 Claim 22 concerns a device that is configured specifically for producing products as per claim 17 and therefore the subject matter of claim 22 meets the requirements of PCT Article 33(2) and (3) for the same reasons as specified above in relation to claim 17.

- 5 Claims 2-16, 18-21 and 23-24 are dependent on claims 1, 17 and 22, respectively, and therefore likewise meet the PCT requirements for novelty and inventive step.